

CLAIMS

1. A polynucleotide comprising of a first polynucleotide comprising encoding an immunostimulatory factor that is differentially expressed in an antigen presenting cell and comprising or corresponding to a tag shown in Table 1 or its complement, wherein the first polynucleotide encodes a factor selected from the group consisting of PARC, TARC, monocyte chemoattractant protein-4 (MDP-4), MDC, escalatin, MCP-2 or biologically active fragments thereof.
2. The polynucleotide of claim 1 further comprising a first and second promoter, wherein the first and second polynucleotides are under the transcriptional control of the first and second promoters, respectively.
3. The polynucleotide of claim 1 further comprising a first and second promoter, wherein the first and second polynucleotides are under the transcriptional control of the single promoter.
4. A gene delivery vehicle comprising a polynucleotide of claim 1.
5. A host cell that comprises a polynucleotide of claim 1.
6. An array of probes comprising a polynucleotide of claim 1 bound to a chip.
7. A polynucleotide comprising a first polynucleotide comprising encoding an immunostimulatory factor that is differentially expressed in an antigen presenting cell and comprising or corresponding to a tag shown in Table 1 and a second polynucleotide that modulates the expression of the first polynucleotide, wherein the first polynucleotide encodes PARC, monocyte chemoattractant protein-4 (MDP-4), MDC, escalectin, MCP-2 or biologically active fragments thereof.
8. A polynucleotide of claim 7, wherein said second polynucleotide modulates the expression of a third polynucleotide which encodes an immunostimulatory factor that is differentially expressed in an antigen presenting cell, wherein the third polynucleotide comprises or corresponds to a tag shown in Table 1.
9. A gene delivery vehicle comprising the polynucleotides of claim 7.
10. A host cell comprising the polynucleotides of claim 7.
11. A method for inducing an immune response in a subject comprising administering an effective amount of the polynucleotide of claim 1, to the subject.

- | Variable                                  | Mean | Standard Deviation | Minimum | Maximum |
|---|------|--------------------|---------|---------|
| Age                                       | 34.5 | 10.5               | 20      | 55      |
| Gender                                    | 0.5  | 0.5                | 0       | 1       |
| Marital Status                            | 0.5  | 0.5                | 0       | 1       |
| Education                                 | 12.5 | 1.5                | 10      | 15      |
| Income                                    | 3000 | 1000               | 1000    | 5000    |
| Health                                    | 0.5  | 0.5                | 0       | 1       |
| Smoking                                   | 0.5  | 0.5                | 0       | 1       |
| Alcohol                                   | 0.5  | 0.5                | 0       | 1       |
| Exercise                                  | 0.5  | 0.5                | 0       | 1       |
| Stress                                    | 0.5  | 0.5                | 0       | 1       |
| Sleep                                     | 0.5  | 0.5                | 0       | 1       |
| Appetite                                  | 0.5  | 0.5                | 0       | 1       |
| Mood                                      | 0.5  | 0.5                | 0       | 1       |
| Energy                                    | 0.5  | 0.5                | 0       | 1       |
| Concentration                             | 0.5  | 0.5                | 0       | 1       |
| Memory                                    | 0.5  | 0.5                | 0       | 1       |
| Emotion                                   | 0.5  | 0.5                | 0       | 1       |
| Behavior                                  | 0.5  | 0.5                | 0       | 1       |
| Thought                                   | 0.5  | 0.5                | 0       | 1       |
| Feeling                                   | 0.5  | 0.5                | 0       | 1       |
| Perception                                | 0.5  | 0.5                | 0       | 1       |
| Attention                                 | 0.5  | 0.5                | 0       | 1       |
| Intuition                                 | 0.5  | 0.5                | 0       | 1       |
| Imagination                               | 0.5  | 0.5                | 0       | 1       |
| Reasoning                                 | 0.5  | 0.5                | 0       | 1       |
| Logic                                     | 0.5  | 0.5                | 0       | 1       |
| Analysis                                  | 0.5  | 0.5                | 0       | 1       |
| Synthesis                                 | 0.5  | 0.5                | 0       | 1       |
| Evaluation                                | 0.5  | 0.5                | 0       | 1       |
| Comparison                                | 0.5  | 0.5                | 0       | 1       |
| Classification                            | 0.5  | 0.5                | 0       | 1       |
| Organization                              | 0.5  | 0.5                | 0       | 1       |
| Planning                                  | 0.5  | 0.5                | 0       | 1       |
| Problem Solving                           | 0.5  | 0.5                | 0       | 1       |
| Decision Making                           | 0.5  | 0.5                | 0       | 1       |
| Communication                             | 0.5  | 0.5                | 0       | 1       |
| Interpersonal Skills                      | 0.5  | 0.5                | 0       | 1       |
| Teamwork                                  | 0.5  | 0.5                | 0       | 1       |
| Leadership                                | 0.5  | 0.5                | 0       | 1       |
| Management                                | 0.5  | 0.5                | 0       | 1       |
| Organization Skills                       | 0.5  | 0.5                | 0       | 1       |
| Time Management                           | 0.5  | 0.5                | 0       | 1       |
| Resource Management                       | 0.5  | 0.5                | 0       | 1       |
| Conflict Resolution                       | 0.5  | 0.5                | 0       | 1       |
| Stress Management                         | 0.5  | 0.5                | 0       | 1       |
| Emotional Regulation                      | 0.5  | 0.5                | 0       | 1       |
| Self-Motivation                           | 0.5  | 0.5                | 0       | 1       |
| Goal Setting                              | 0.5  | 0.5                | 0       | 1       |
| Problem Solving Skills                    | 0.5  | 0.5                | 0       | 1       |
| Decision Making Skills                    | 0.5  | 0.5                | 0       | 1       |
| Communication Skills                      | 0.5  | 0.5                | 0       | 1       |
| Interpersonal Skills Skills               | 0.5  | 0.5                | 0       | 1       |
| Teamwork Skills                           | 0.5  | 0.5                | 0       | 1       |
| Leadership Skills                         | 0.5  | 0.5                | 0       | 1       |
| Management Skills                         | 0.5  | 0.5                | 0       | 1       |
| Organization Skills Skills                | 0.5  | 0.5                | 0       | 1       |
| Time Management Skills                    | 0.5  | 0.5                | 0       | 1       |
| Resource Management Skills                | 0.5  | 0.5                | 0       | 1       |
| Conflict Resolution Skills                | 0.5  | 0.5                | 0       | 1       |
| Stress Management Skills                  | 0.5  | 0.5                | 0       | 1       |
| Emotional Regulation Skills               | 0.5  | 0.5                | 0       | 1       |
| Self-Motivation Skills                    | 0.5  | 0.5                | 0       | 1       |
| Goal Setting Skills                       | 0.5  | 0.5                | 0       | 1       |
| Problem Solving Skills Skills             | 0.5  | 0.5                | 0       | 1       |
| Decision Making Skills Skills             | 0.5  | 0.5                | 0       | 1       |
| Communication Skills Skills               | 0.5  | 0.5                | 0       | 1       |
| Interpersonal Skills Skills Skills        | 0.5  | 0.5                | 0       | 1       |
| Teamwork Skills Skills                    | 0.5  | 0.5                | 0       | 1       |
| Leadership Skills Skills                  | 0.5  | 0.5                | 0       | 1       |
| Management Skills Skills                  | 0.5  | 0.5                | 0       | 1       |
| Organization Skills Skills Skills         | 0.5  | 0.5                | 0       | 1       |
| Time Management Skills Skills             | 0.5  | 0.5                | 0       | 1       |
| Resource Management Skills Skills         | 0.5  | 0.5                | 0       | 1       |
| Conflict Resolution Skills Skills         | 0.5  | 0.5                | 0       | 1       |
| Stress Management Skills Skills           | 0.5  | 0.5                | 0       | 1       |
| Emotional Regulation Skills Skills        | 0.5  | 0.5                | 0       | 1       |
| Self-Motivation Skills Skills             | 0.5  | 0.5                | 0       | 1       |
| Goal Setting Skills Skills                | 0.5  | 0.5                | 0       | 1       |
| Problem Solving Skills Skills Skills      | 0.5  | 0.5                | 0       | 1       |
| Decision Making Skills Skills Skills      | 0.5  | 0.5                | 0       | 1       |
| Communication Skills Skills Skills        | 0.5  | 0.5                | 0       | 1       |
| Interpersonal Skills Skills Skills Skills | 0.5  | 0.5                | 0       | 1       |
| Teamwork Skills Skills Skills             | 0.5  | 0.5                | 0       | 1       |
| Leadership Skills Skills Skills           | 0.5  | 0.5                | 0       | 1       |
| Management Skills Skills Skills           | 0    |                    |         |         |